



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,679	03/30/2000	Greg Linden	249768021US	8745
25096	7590	01/09/2008	EXAMINER	
PERKINS COIE LLP			CUFF, MICHAEL A	
PATENT-SEA				
P.O. BOX 1247			ART UNIT	PAPER NUMBER
SEATTLE, WA 98111-1247			3627	
			MAIL DATE	DELIVERY MODE
			01/09/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

1

2 UNITED STATES PATENT AND TRADEMARK OFFICE

3

4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES

6

7

8

Ex parte GREG LINDEN

9

10

11

12

13

Appeal 2007-0702
Application 09/538,679
Technology Center 3600

14

15

16

Decided: January 9, 2008

17

18

19 Before HUBERT C. LORIN, ANTON W. FETTING, and
20 JOSEPH A. FISCHETTI, *Administrative Patent Judges*.

21 FETTING, *Administrative Patent Judge*.

22

DECISION ON APPEAL

23

24

STATEMENT OF CASE

25

Greg Linden (Appellant) seeks review under 35 U.S.C. § 134 of a
26 Final Rejection of claims 1-36, 56, and 57, the only claims pending and not
27 withdrawn in the application on appeal.¹

¹ Claims 42-53 are cancelled and claims 37-41 and 54-55 are withdrawn.

1 We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b)
2(2002).

3
4 We AFFIRM-IN-PART.

5 The Appellant invented a way for automatically identifying similar
6purchasing opportunities. For example, for an initial auction, the invention
7can identify auctions, or purchasing opportunities of other types, that offer
8the same or a similar item, similar prices or other terms (Specification 2:14-
917).

10 Descriptive information about an initial purchasing opportunity is
11used to identify purchasing opportunities that are similar to the initial
12purchasing opportunity. The descriptive information may describe the item
13offered, as well as other terms of the purchasing opportunity, such as price,
14availability, seller identity or location, purchasing opportunity type
15(Specification 2:18-24).

16 Initially, key words occurring in the descriptive information for an
17initial purchasing opportunity are identified whose occurrence tend to best
18differentiate the initial purchasing opportunity from others. Then a score is
19attributed to each key word quantifying this tendency. In a preferred
20embodiment, key words are identified and scores attributed using the inverse
21document frequencies of the terms occurring in the descriptive information
22for the initial purchasing opportunity. The inverse document frequency of a
23term measures the fraction of occurrences of the term among the descriptive

1information for all of the purchasing opportunities that occur in the
2descriptive information for the initial purchasing opportunity. For example,
3if a particular term occurred three times in the descriptive information for
4the initial purchasing opportunity and occurred 100 times in the descriptive
5information for all of the purchasing opportunities, that term would have an
6inverse document frequency of 3%, or .03 (Specification 2:25-3:9).

7 The descriptive information is searched for all of the purchasing
8opportunities to determine, for each key word, which purchasing
9opportunities' descriptive information contains the key word. Then
10similarity scores are generated for at least some of the other purchasing
11opportunities by, for each such purchasing opportunity, summing the scores
12of key words that occur in the purchasing opportunities (Specification 3:10-
1317).

14 The purchasing opportunity scores may then be used to order the
15purchasing opportunities based upon their level of similarity to the initial
16purchasing opportunity (Specification 3:18-27).

17 An understanding of the invention can be derived from a reading of
18exemplary claims 1 and 2, which are reproduced below [bracketed matter
19and some paragraphing added].

20 1. A method in one or more computer systems for identifying
21 auctions offering units of the same item, comprising:
22 [1] displaying information about a first auction,
23 the information including a description of a first item unit
24 offered in the first auction;

- 1 [2] receiving user input requesting information about other
- 2 auctions offering item units that are units of the same item as
- 3 the first item unit;
- 4 [3] determining,
 - 5 for the description of the first item unit
 - 6 among descriptions of item units
 - 7 offered in a group of auctions including the first
 - 8 auction,
 - 9 the inverse document frequency of terms occurring
 - 10 within the description of the first item unit;
- 11 [4] selecting a plurality of terms
- 12 within the description of the first item unit
- 13 having the largest inverse document frequencies;
- 14 [5] for each of the selected terms,
 - 15 conducting a search for auctions in the group
 - 16 whose item descriptions contain the selected term;
- 17 [6] for each auction found in at least one of the conducted
- 18 searches,
 - 19 determining which of the selected terms occur in the
 - 20 auction's item description;
- 21 [7] identifying
- 22 as an auction offering an item unit that is a unit of the
- 23 same item as the first item unit[,]
- 24 an auction among the found auctions
- 25 where the sum of the inverse document
- 26 frequencies of the selected terms that occur in the
- 27 item description for the auction exceeds a
- 28 threshold; and
- 29 [8] displaying information about the identified auction.

1 2. A method in a computer system for identifying purchasing
2 opportunities within a set of purchasing opportunities that are
3 similar to a distinguished purchasing opportunity, the
4 distinguished purchasing opportunity having descriptive
5 information associated with it, comprising:
6 [1] for each of a plurality of terms occurring in the descriptive
7 information associated with the distinguished purchasing
8 opportunity,
9 generating a term score
10 reflecting the extent to which
11 the occurrence of the term in the descriptive
12 information associated with the
13 distinguished purchasing opportunity
14 differentiates
15 the distinguished purchasing opportunity
16 from other purchasing opportunities in the
17 set;
18 [2] selecting as key words a plurality of terms having the
19 highest term scores;
20 [3] identifying purchasing opportunities of the set containing
21 one or more key words;
22 [4] establishing a purchasing opportunity score
23 for each identified purchasing opportunity
24 by summing the term score of the one or more key words
25 occurring in descriptive information associated with the
26 identified purchasing opportunities; and
27 [5] displaying information about one or more of the identified
28 purchasing opportunities.

1 This appeal arises from the Examiner's Final Rejection, mailed June
2 214, 2004. The Appellant filed an Appeal Brief in support of the appeal on
3 May 9, 2005. An Examiner's Answer to the Appeal Brief was mailed on
4 May 19, 2006. A Reply Brief was filed on July 19, 2006. The Appellant
5 presented arguments telephonically at a hearing on December 19, 2007.

6 PRIOR ART

7 The Examiner relies upon the following prior art:

8

⁹Ishikawa US 5,848,407 Dec. 8, 1998
Sato US 6,212,517 B1 Apr. 3, 2001

10

¹¹Phillips Semiconductors; PIP for Compandor SA571 ,
¹²<http://www.kwantlen.bc.ca/electronicis/eltn2319/edata/lab/datasheets/compandor571.html> (last visited Aug. 27, 2003).

14 REJECTIONS

15 Claim 1 stands rejected under 35 U.S.C. § 112, first paragraph, as not
16enabling a person of ordinary skill in the art to make and use the claimed
17subject matter from the original disclosure.

18 Claim 1 stands rejected under 35 U.S.C. § 112, second paragraph, as
19 failing to particularly point out and distinctly claim the invention.

20 Claims 1-36, 56, and 57 stand rejected under 35 U.S.C. § 103(a) as
21unpatentable over Phillips, Sato, and Ishikawa.

1

ISSUES

2 The issues pertinent to this appeal are

3 • Whether the Appellant has sustained its burden of showing that the
4 Examiner erred in rejecting claim 1 under 35 U.S.C. § 112, first
5 paragraph, as not enabling a person of ordinary skill in the art to make
6 and use the claimed subject matter from the original disclosure.

7 • Whether the Appellant has sustained its burden of showing that the
8 Examiner erred in rejecting claim 1 under 35 U.S.C. § 112, second
9 paragraph, as failing to particularly point out and distinctly claim the
10 invention.

11 • Whether the Appellant has sustained its burden of showing that the
12 Examiner erred in rejecting claims 1-36, 56, and 57 under 35 U.S.C. §
13 103(a) as unpatentable over Phillips, Sato, and Ishikawa.

14 The pertinent issues turn on whether (1) the claim 1 limitation of a
15 same item is enabled and definite, and whether (2) the art describes the use
16 of an inverse document frequency as recited in claim 1, and whether (3) the
17 art describes the use of terms scores as recited in claim 2.

18

FACTS PERTINENT TO THE ISSUES

19 The following enumerated Findings of Fact (FF) are believed to be
20 supported by a preponderance of the evidence.

21 *Claim Construction*

27

- 1 1. The disclosure contains no lexicographic definition of “same.”
- 2 2. The ordinary and customary meaning of “same” is (1) being the
3 very one; identical; (2) similar in kind, quality, quantity, or
4 degree; (3) conforming in every detail; or (4) being the one
5 previously mentioned or indicated; aforesaid.²

6 *Phillips*

- 7 3. Phillips is an electronic manufacturer’s sales information sheet
8 describing a particular electronic device referred to as model
9 SA571 of a compandor.³

10 *Sato*

- 11 4. Sato is directed toward a subsystem of a document retrieval
12 system for receiving a list of documents (or texts) selected from a
13 text base and providing a list of keywords ranked in order of
14 importance in the selected text group (Sato 1:7-11).
- 15 5. Sato describes a computation of a degree of importance for each
16 search term that is based upon, among other variables, an inverse
17 document frequency for that term. Sato performs a search based
18 upon the degree of importance of terms (Sato 5:58 – 7:33).
- 19 6. Sato does not describe identifying information based on a measure
20 exceeding a threshold.

31² *American Heritage Dictionary of the English Language* (4th ed. 2000).

32³ A compandor is a combination of a signal compressor and expander, each
33of which may be used independently (wwwatis.org/tg2k/_compandor.html).

1 Ishikawa

2 7. Ishikawa is directed toward a hypertext document retrieving
3 apparatus in which a plurality of hypertext documents likely to
4 meet a user's retrieval request are retrieved from a large volume of
5 hypertext documents and are presented to the user (Ishikawa 1:7-
6 12).
7 8. Ishikawa describes a computation of a product for each search
8 term of an occurrence frequency (TF) with an inverse document
9 frequency (IDF). Sato performs a ranking of results based upon
10 these products of the terms (Ishikawa 7:45 – 8:9). This ranking
11 may also be on the sum of the products (Ishikawa 11:31-40).
12 9. Ishikawa describes a user entering keywords for a search, and
13 documents containing one or more of those keywords are
14 retrieved. These documents are then ranked as in FF .
15 10. Ishikawa does not describe identifying information based on a
16 measure exceeding a threshold.

PRINCIPLES OF LAW

18 *Claim Construction*

19 During examination of a patent application, pending claims are
20 given their broadest reasonable construction consistent with the
21 specification. *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969); *In*
22 *re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

1 Limitations appearing in the specification but not recited in the claim
2 are not read into the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d
3 1364, 1369 (Fed. Cir. 2003) (claims must be interpreted “in view of the
4 specification” without importing limitations from the specification into the
5 claims unnecessarily).

6 Although a patent applicant is entitled to be his or her own
7 lexicographer of patent claim terms, in *ex parte* prosecution it must be
8 within limits. *In re Corr*, 347 F.2d 578, 580 (CCPA 1965). The applicant
9 must do so by placing such definitions in the specification with sufficient
10 clarity to provide a person of ordinary skill in the art with clear and precise
11 notice of the meaning that is to be construed. *See also In re Paulsen*, 30
12 F.3d 1475, 1480 (Fed. Cir. 1994) (although an inventor is free to define the
13 specific terms used to describe the invention, this must be done with
14 reasonable clarity, deliberateness, and precision; where an inventor chooses
15 to give terms uncommon meanings, the inventor must set out any
16 uncommon definition in some manner within the patent disclosure so as to
17 give one of ordinary skill in the art notice of the change).

18 *Enablement*

19 The test of enablement is whether one reasonably skilled in the art
20 could make and use the claimed invention based on the specification
21 coupled with information known in the art without undue experimentation.
22 *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384
23 (Fed. Cir. 1986), *cert. denied*, 107 S.Ct. 1606 (1987).

24 *Indefiniteness*

1 If a claim is amenable to construction, “even though the task may be
2formidable and the conclusion may be one over which reasonable persons
3will disagree,” the claim is not indefinite. *Exxon Res. & Eng’g Co. v.*
4*United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001).

5*Obviousness*

6 A claimed invention is unpatentable if the differences between it and
7the prior art are “such that the subject matter as a whole would have been
8obvious at the time the invention was made to a person having ordinary skill
9in the art.” 35 U.S.C. § 103(a) (2000); *KSR Int’l v. Teleflex Inc.*, 127 S.Ct.
101727, 1729-30 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14
11(1966).

12 In *Graham*, the Court held that that the obviousness analysis is
13bottomed on several basic factual inquiries: “[1] the scope and content of
14the prior art are to be determined; [(2)] differences between the prior art and
15the claims at issue are to be ascertained; and [(3)] the level of ordinary skill
16in the pertinent art resolved.” 383 U.S. at 17. *See also KSR Int’l v. Teleflex*
17*Inc.*, 127 S.Ct. at 1734. “The combination of familiar elements according to
18known methods is likely to be obvious when it does no more than yield
19predictable results.” *KSR*, at 1739.

20 “When a work is available in one field of endeavor, design incentives
21and other market forces can prompt variations of it, either in the same field
22or [in] a different one. If a person of ordinary skill [in the art] can
23implement a predictable variation, § 103 likely bars its patentability.” *Id.* at
241740.

1 “For the same reason, if a technique has been used to improve one
2 device, and a person of ordinary skill in the art would recognize that it would
3 improve similar devices in the same way, using the technique is obvious
4 unless its actual application is beyond his or her skill.” *Id.*

5 “Under the correct analysis, any need or problem known in the field
6 of endeavor at the time of invention and addressed by the patent can provide
7 a reason for combining the elements in the manner claimed.” *Id.* at 1742.

ANALYSIS

9 *Claim 1 rejected under 35 U.S.C. § 112, first paragraph, as not enabling a*
10 *person of ordinary skill in the art to make and use the claimed subject*
11 *matter from the original disclosure.*

12 The Examiner has failed to make out a prima facie case of a lack of
13enablement. As best we understand it, the Examiner takes the position that
14the claimed method is inoperable if the term “same” used in claim 1 means
15identical. However, the test for enablement is whether one reasonably skilled
16in the art could make and use the claimed invention based on the
17specification coupled with information known in the art without undue
18experimentation, not whether the Examiner has interpreted the claim so as to
19read on an inoperable embodiment. The Examiner does not appear to have
20considered the Specification and thus has not established that one reasonably
21skilled in the art could *not* make and use the claimed invention based on the
22specification coupled with information known in the art without undue

1 experimentation. It is examiner's burden to show that one skilled in the art
2 would have to resort to undue experimentation in order to practice the
3 invention as broadly claimed. See *In re Marzocchi*, 439 F.2d 220, 224, 169
4 USPQ 367, 370 (CCPA 1971).

5 The Examiner erred in rejecting claim 1 under 35 U.S.C. § 112, first
6 paragraph, as not enabling a person of ordinary skill in the art to make and
7 use the claimed subject matter from the original disclosure.

8 *Claim 1 rejected under 35 U.S.C. § 112, second paragraph, as failing to
9 particularly point out and distinctly claim the invention.*

10 The Examiner found that the Appellant gave the word "same" a
11 meaning different from identical, and further found the use of the word
12 "same" to be indefinite because claim 1 is not specific regarding which
13 definition applies (Answer 5).

14 The Appellant contends that its use of the term "same" in the context
15 of "units of the same item" is consistent with its ordinary and customary
16 meaning. Taking an item example of the Specification, a same item might
17 be an item of the exact same model. This understanding of the term "units
18 of the same item" is consistent both with the ordinary meaning of the term
19 "same" and with the use of the term in the Specification itself (Appeal Br.
207:Bottom ¶ - 8:Top ¶).

21 We agree that one of ordinary skill would have known that a same
22 item would be something like an item with the same model number.

1Although this is merely an example, one of ordinary skill in sales and
2auctions would understand the word “same” applied to “item” to be within
3the context of the items sold or auctioned. While the term is broad, it is
4amenable to construction.

5 The Appellant has sustained its burden of showing that the Examiner
6erred in rejecting claim 1 under 35 U.S.C. § 112, second paragraph, as
7failing to particularly point out and distinctly claim the invention.

8 *Claims 1-36, 56, and 57 rejected under 35 U.S.C. § 103(a) as unpatentable
9 over Phillips, Sato, and Ishikawa.*

10*Claim 1*

11 The Appellant argues claims 1, 56, and 57 as a group.

12 Accordingly, we select claim 1 as representative of the group.

1337 C.F.R. § 41.37(c)(1)(vii) (2007).

14 The Examiner found that Phillips described elements [1], [2], and [8],
15except for being applied to an auction, but took official notice of the
16notoriety of auctions. The Examiner found that Sato described elements [3]
17and [4], and that Ishikawa describes elements [5], [6], and [7] (Answer 5-6).

18 The dispositive Appellant contentions are that (1) neither reference
19selects a plurality of terms within the description of the first item unit having
20the largest inverse document frequencies (Reply Br. 9:First full ¶); and (2)
21neither reference identifies something where the sum of the inverse

1document frequencies of the selected terms that occur in the item description
2for the auction exceeds a threshold (Reply Br. 9:Bottom ¶ - 12:First ¶).

3 The Examiner cites Sato column 7, lines 27-30 for the largest inverse
4document frequency selection. The Appellant argues this portion of Sato
5examines Sato's degree of importance, not its inverse document frequency.
6We agree (FF). Since the Examiner has not shown that either reference
7selects terms having the largest inverse document frequency selection, the
8Examiner has not made a *prima facie* case as to element [4].

9 The Examiner cites Ishikawa column 7, line 53 to column 8 line 9 and
10column 11, lines 33-45 for identifying information where the sum of the
11inverse document frequencies of the selected terms that occur in the item
12description for the auction exceeds a threshold. The Appellant argues this
13portion of Ishikawa examines Ishikawa's importance degrees, not its inverse
14document frequency, and the Examiner never has a finding as to identifying
15by exceeding a threshold. We agree (FF , , and). Since the Examiner has
16not shown that either reference identifies information where the sum of the
17inverse document frequencies of the selected terms that occur in the item
18description for the auction exceeds a threshold, the Examiner has not made a
19*prima facie* case as to element [7].

20 The Appellant has sustained its burden of showing that the Examiner
21erred in rejecting claims 1, 56, and 57 under 35 U.S.C. § 103(a) as
22unpatentable over Phillips, Sato, and Ishikawa.

23*Claim 2*

1 The Appellant argues claims 2-36 as a group.

2 Accordingly, we select claim 2 as representative of the group.

3 The Examiner found that Phillips described identifying purchasing
4opportunities and element [5]. The Examiner found that Sato described
5elements [1] and [2], and that Ishikawa describes elements [3] and [4]
6(Answer 7-8).

7 The Appellant contends that (1) Ishikawa's key words are (1a)
8selected by a user rather than from an item description, and (1b) are
9computed differently than as computed in the Appellant's Specification
10(Reply Br. 13:First ¶); (2) that Ishikawa fails to use term scores in the two
11distinct ways recited in claim 2 of (2a) selecting keywords and (2b) scoring
12purchasing opportunities (Reply Br. 13:Bottom ¶ - 14:Top ¶); and (3)
13Phillips relies on product categories rather than product descriptions to find
14products (Appeal Br. 15).

15 As to the arguments regarding the search terms, the scope of the claim
16is not commensurate with argument (1a) because the terms a user enters in
17Ishikawa (FF), within the context of searching for an item as a purchasing
18opportunity, such as in Phillips, would be descriptive information associated
19with a a purchasing opportunity as in claim 2. Whether the terms are
20selected by a user makes terms no less associated with the item the terms
21describe. Whether the score for search terms are computed as in the
22Appellant's Specification is not pertinent since claims are construed

1according to their broadest reasonable interpretation during examination, and
2claim 2 does not specify the steps in scoring.

3 As to the arguments regarding the use of the scores, although both
4 Sato and Ishikawa score keywords, it is Sato, not Ishikawa, that ranks
5 keywords for searching (FF) and Ishikawa that ranks the results based on
6 the sum of keyword scores (FF) that would represent purchasing
7 opportunities within the context of searching for such opportunities. Thus,
8 Sato teaches choosing the best search terms as in claim elements [1] and [2]
9 and Ishikawa describes ranking results as in claim elements [3] and [4].

10 As to the argument regarding product category versus product
11description searching, although Phillips does not explicitly recite searching
12for items, the very presence of Phillips information in a web based document
13suggests one of ordinary skill would have alternatively employed the
14ubiquitous search engines such as in Sato and Ishikawa to find products if
15one was not already on the Phillips web site.

16 The Appellant has not sustained its burden of showing that the
17 Examiner erred in rejecting claims 2-36 under 35 U.S.C. § 103(a) as
18 unpatentable over Phillips, Sato and Ishikawa.

19 CONCLUSIONS OF LAW

20 The Appellant has sustained its burden of showing that the Examiner
21 erred in rejecting claims 1, 56, and 57, but has not sustained its burden of

1 showing that the Examiner erred in rejecting claims 2-36, under 35 U.S.C. §
2103(a) as unpatentable over Phillips, Sato, and Ishikawa.

DECISION

4 To summarize, our decision is as follows:

- The rejection of claim 1 under 35 U.S.C. § 112, first paragraph, as not enabling a person of ordinary skill in the art to make and use the claimed subject matter from the original disclosure is not sustained.
- The rejection of claim 1 under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the invention is not sustained.
- The rejection of claims 1, 56, and 57 under 35 U.S.C. § 103(a) as unpatentable over Phillips, Sato, and Ishikawa is not sustained.
- The rejection of claims 2-36 under 35 U.S.C. § 103(a) as unpatentable over Phillips, Sato, and Ishikawa is sustained.

15 No time period for taking any subsequent action in connection with
16this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

75Appeal 2007-0702
76Application 09/538,679
77

1hh

2PERKINS COIE, LLP
3PATENT-SEA
4P.O. BOX 1247
5SEATTLE, WA 98111-1247

6

7